

Amendments To the Claims:

Please amend the claims as shown.

1. (currently amended) A method for the spectral evaluation of an object to be tested in operating states characterized by operating parameters, ~~a first operating parameter being an actual rotational speed value, wherein automatically~~ comprising:

providing a first operating parameter that is an actual rotational speed value;

automatically recording a frequency spectrum (22, 23) of the object to be tested is ~~recorded~~ by measuring means, wherein the frequency spectrum (22, 23) has first amplitude values which depend on first frequency values;_i

automatically using the first frequency values of the frequency spectrum (22, 23) ~~are used~~ for normalization in relation to the actual rotational speed value;_i

automatically forming an alarm curve (2) ~~is formed~~ with second amplitude values which depend on second frequency values;_i

automatically using the second frequency values of the alarm curve (2) ~~are used~~ for normalization in relation to the actual rotational speed value;_i

automatically changing the second amplitude values of the alarm curve (2) ~~are changed~~ according to the operating parameters;_i

automatically comparing the first amplitude values of the normalized frequency spectrum (22, 23) ~~are compared~~ with the second amplitude values of the normalized alarm curve (2) which is changed according to the operating parameters;_i and

using a result of the comparison ~~is used~~ to evaluate the object to be tested.

2. (currently amended) A method according to Claim 1, ~~characterized in that~~ wherein the operating states of the object to be tested are characterized by a second operating parameter which is proportional to a load of the object to be tested.

3. (currently amended) A method according to Claim 1 ~~or Claim 2, characterized in that~~ wherein the operating states of the object to be tested are characterized by a third operating parameter which is proportional to a temperature of the object to be tested.

4. (currently amended) A method according to ~~one of the preceding claims 1, characterized~~
~~d-in-that~~ wherein the second amplitude values of the alarm curve (2) are changed
according to a function of the operating parameters, ~~which function can be specified by a user.~~

5. (currently amended) A method according to ~~one of the preceding claims 1, characterized~~
~~d-in-that~~ wherein the alarm curve (2) which is normalized and changed according to the
operating parameters forms an envelope curve over the normalized frequency spectrum (22, 23)
of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at
least one amplitude value of the normalized frequency spectrum (22, 23) lies outside the
envelope curve.

6. (currently amended) A method according to ~~one of the preceding claims 1, characterized~~
~~d-in-that~~ wherein the measuring means are fashioned as vibro-acoustic measuring means.

7. (currently amended) ~~Use of the A~~ method according to ~~one of Claims 1 to 6~~ for the use of the
a spectral evaluation of a machine.

8. (currently amended) ~~Use of the A~~ method according to ~~one of Claim 1 to 6~~ for the use of
monitoring the vibration of vehicle components.

9. (new) A method according to Claim 2, wherein the operating states of the object to be tested
are characterized by a third operating parameter which is proportional to a temperature of the
object to be tested.

10. (new) A method according to Claim 4, wherein the function of the operating parameters is
specified by a user.

11. (new) A method according to claim 2, wherein the second amplitude values of the alarm
curve are changed according to a function of the operating parameters.

12. (new) A method according to claim 3, wherein the second amplitude values of the alarm
curve are changed according to a function of the operating parameters.

13. (new) A method according to claim 2, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

14. (new) A method according to claim 3, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

15. (new) A method according to claim 4, wherein the alarm curve which is normalized and changed according to the operating parameters forms an envelope curve over the normalized frequency spectrum of the object to be tested in a fault-free normal condition, wherein an alarm is generated if at least one amplitude value of the normalized frequency spectrum lies outside the envelope curve.

16. (new) A method according to claim 2, wherein the measuring means are fashioned as vibro-acoustic measuring means.

17. (new) A method according to claim 3, wherein the measuring means are fashioned as vibro-acoustic measuring means.